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Expansion and Contraction Under the Federal Reserve System

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MUCH confusion of thought on the subject of expansion and contraction is due to our failure to distinguish clearly between three different problems. An economic system, which operates on a money and credit basis, and which maintains business relations with the systems of other countries, cannot well escape these difficulties. Each of the three facts involved is at times referred to as "depreciation."

THE THREE KINDS OF "DEPRECIATION"

One of them is the relation of a given financial system, such as that of the United States, to that of other countries as reflected in foreign exchange quotations. The British pound is worth at mint par \$4.8665, the German mark, 23.8 cents, the French franc, 19.3 cents and so on. When, as at present, these moneys are bought and sold in our markets at about \$3.80, one-third of a cent and 7.25 cents, respectively, it is customary to say that the moneys of those countries are depreciated. During the late War the moneys of the belligerent countries were thus depreciated in the United States, while at the same time our money was depreciated in certain neutral countries.

The causes of such a condition we need not here explain, but one point needs emphasis. In every case where such depreciation occurs there is merely an increase in the value of the first money in terms of the second and a decrease in the value of the second in terms of the first. In terms of the American dollar the pound sterling is now lower than usual, and

in terms of the pound sterling our dollar is higher than usual. For a period of time several years ago the American dollar was lower than usual in terms of the money of Sweden, and Sweden's money was higher than usual in terms of our dollar. Foreign exchange quotations are for the most part merely a barometer or index, an effect and not a cause, but what they state is a change in the relative position of the moneys of two countries. The appreciation of one involves the depreciation of the other, and vice versa.

A second kind of depreciation is found when one form of money, say the standard money gold, changes in its relationship to some other form of money in the same country. Such a change occurred in the United States during the Civil War, when the "greenbacks" or United States notes were issued in very large quantities and were acceptable at less than their face value in exchange for gold. At one time a dollar of gold would purchase as much as \$1.85 in greenbacks. The greenbacks had depreciated in terms of gold, and gold had appreciated in terms of greenbacks. Again it is a question of the relationship between the two.

A third type of depreciation is to be observed when the general price level changes. If prices in general rise to a higher level than that of the past it may be said that the value of commodities in the country has appreciated in terms of money and that the value of the money has depreciated in terms of the commodities. Similarly, if the general price level falls, there is an appreciation of the value

of the money in terms of commodities and a depreciation of the value of the commodities in terms of money.

These three forms of depreciation are well understood by most persons who are at all acquainted with financial questions. Nevertheless, they are closely interrelated, and when a particular problem is up for consideration these interrelationships may be overlooked and confusion of thought result.

"EXPANSION" AND "INFLATION"

One other definition is necessary. "Expansion" is a word that is used very loosely. Sometimes, though not always, it is employed as a synonym for "inflation." With these two words, or rather in contrast to them, are "contraction" and "deflation."

Any and every increase in the volume of circulating medium in the United States is not inflation. As population grows and as business activity increases a larger amount of circulating medium is needed if the price level is not to decline. If its amount should remain the same the price level would fall and we would suffer all of the accompanying hardships. As the volume of trade increases it is better to have an increase in the volume of circulating medium. If this occurs and at the same rate as the growth in trade there are no harmful effects, and it would not be correct to say there had been inflation. A mere increase in the volume of money or credit is not inflation, for the increase must be viewed in its relation to the demand for it. Similarly, a decrease is not to be referred to as deflation if it merely corresponds to a decline in the volume of business, *i.e.*, to a reduction in demand. The price level is not affected and no hardship results.

Changes in the volume of money and

credit that only adjust their supply to the demand for them are better referred to as a contraction and an expansion that merely evidence the elasticity of a monetary and banking system. For years the Canadian bank note issues have increased in the fall of each year to meet the demand for crop-moving, and have later contracted when that demand ceased. Such changes ought not to be referred to as inflation and deflation, but as a most desirable expansion and contraction.

It is true that expansion of this kind might become dangerous, but it is not probable. The volume of note issues or of deposit liabilities in relation to reserves might become too large as compared with the reserve held for redemption purposes. Public knowledge of this situation might result in a run on the banks and the failure of some of them, even though the expansion had occurred merely to meet the needs of a rapidly growing trade. However, this kind of expansion is not apt to take place. There are both seasonal and cyclical fluctuations in the demand for money and credit, but in actual experience they are not likely to result in a condition of the sort just described. While an expansion does take place, ordinary trade demands are not apt to lower seriously the percentage of reserves held.

There are two periods of activity for analysis in this article. One extends from the formation of the Federal Reserve System in the autumn of 1914 to the spring of 1920. The second continues from that time to the present.

That in the first of these two periods there occurred an increase in the volume of circulating medium does not need to be argued here. Nor need we stop to demonstrate in detail that this increase was more rapid than the

growth in the volume of trade. Professor Kemmerer, in his volume *High Prices and Deflation*,¹ has shown that from 1913 to 1918 there was an increase of 13 per cent in the country's physical volume of business, while in 1919 it actually declined from the 1918 level being only 9.6 per cent greater than in 1913.

During this same period of time there was an increase in wholesale prices as reflected in the United States Bureau of Labor index number of 112 per cent over the 1913 level. Also, the exchange market showed a depreciation of the pound sterling, the mark, the franc, the lira and other foreign currencies in terms of our dollar. We have already pointed out that there are three kinds of depreciation, and the period in question may be examined with a view to determining whether the Federal Reserve System and its management were responsible for such depreciation as occurred.

First, let us notice the increase in the volume of the circulating medium. From November 1, 1913, to November 1, 1918, the amount of money in the United States increased from \$3,755,994,000 to \$7,590,173,000. Of this increase \$1,173,883,000 was in gold (and gold certificates), and \$2,660,296,000 in other forms of money. The increase in our stock of gold had a definite connection with affairs abroad, and will be considered a little later. But there was an increase in the issue of Federal Reserve notes, from nothing to \$2,705,737,000, and in the Federal Reserve Bank notes from nothing to \$71,647,260. Also during approximately the same period the deposit liabilities of the national banks increased from \$6,051,689,000 to \$11,013,330,000. There was without doubt an expansion in our circulating medium more rapid than in the demand for it.

¹ See pages 3-13.

What was the occasion for this and where does responsibility rest?

INCREASED DEPOSIT LIABILITIES

There were three leading reasons. One is found in the very nature of the Federal Reserve System. Our national banking organization as it existed prior to 1914 was said to lack elasticity. Expansion to meet any seasonal or cyclical growth in trade needs was difficult to secure, as was also contraction when the need had passed. Explanation of this difficulty need not be presented here, as the reasons for it are fully understood by most students of the subject, and have been set forth many times.

Under the old law, country banks were required to maintain a reserve of 15 per cent of their deposit liabilities, of which two-fifths, or 6 per cent, had to be in actual cash in their own vaults; reserve city banks, 25 per cent, of which one-half had to be in cash; and central reserve city banks, 25 per cent in cash. The net effect was that there could be on the average about \$8 of deposit liabilities on each \$1 of reserves held by the national banks of the country, or an average cash reserve of $12\frac{1}{2}$ per cent. This varied slightly from time to time, and there have been slight differences in the estimates of students of the question, but the figures are sufficiently accurate for our present purpose.

Under the Federal Reserve Act, particularly as amended, all this was changed. By a concentration of cash in the vaults of the twelve Reserve Banks each dollar could be utilized much more effectively. Accompanying this there was a reduction in the reserve requirements of the member banks, and the net result was that \$1 of reserve furnished the basis for perhaps \$11.50 of deposit liabilities, or an

average cash reserve of about 9 per cent.² Although there may be differences of opinion as to this particular figure, there can be no dispute over the fact of a very pronounced change in the direction indicated.

Whether a change of this kind, which permitted and even encouraged an expansion in deposit liabilities, was wise cannot here be argued, but will be assumed. The United States had been paying too dear a price for its banking system. Greater elasticity was important. It could not be secured except by a centralization of reserves, and centralization of reserves means that each dollar is more effective than before. Under such circumstances an average cash reserve for the country of more than say 10 per cent or 11 per cent would be very difficult and probably impossible to maintain. Such a change as this would have resulted under any plan of banking reform and under any management. Our circulating medium would have expanded more rapidly than the growth in trade demand and, *ceteris paribus*, would have caused a rise in the general price level.

INCREASED GOLD RESERVE

This assumes no alteration in the volume of the gold reserve. A reduction in gold supply would have offset this tendency to expansion, while any increase would enhance it. On this point we need merely refer to the facts, which are that from August 1, 1914, to January 1, 1919, there was an importation (net) of gold into the United States amounting to \$1,071,669,000, which made possible (according to the above ratio of $11\frac{1}{2}$ to 1) an

addition of about \$12,324,193,000 to the deposit liabilities of our banks.

It thus appears that a plan of banking reform was deliberately adopted by the country, after a discussion extending over a number of years, which was one that was sure to increase the deposit liabilities of our banks. Moreover, any other reform, such as the so-called Aldrich Plan, would have had a similar effect.

But can the Federal Reserve System or its management be held responsible for the importation of gold that furnished an additional basis for this expansion? There is certainly no reason for such a view. The intense demand for our commodities and the rapid growth in our export balance threw on the European belligerents the burden of righting in some manner their unfavorable position. Commodities and securities, particularly the latter, were hurried over to us, and especially in the earlier part of the struggle large amounts of gold were sent also. The movement was a part of the general situation, and would have occurred had we still been operating under the old National Bank Law.

In fact, the existence of the Federal Reserve organization facilitated rather than impeded credit transactions, and thus made it easier to check the gold movement. If the older system had still been in operation much more gold might conceivably have been imported into the United States during that period.

STRAIN OF FINANCING WAR PURCHASES

But the analysis is not complete. Admitting that the new reserve requirements and the importation of gold encouraged a considerable expansion, it may be argued that the expansion that really occurred was extreme, going so far that the percentage of

² "Mechanism of Expansion Under the Federal Reserve System"; *Monthly Review of Credit and Business Conditions in the Second Federal Reserve District*, September 1, 1921, p. 12.

reserve actually held by the system was for a long time very close to the legal limit. With the New York Reserve Bank this was particularly noticeable. While the situation was a very strained one for the System as a whole, the condition of the New York Bank was at times especially weak, and was even disguised, though rather poorly, by a change in the form of its weekly reports. Had this been presented in the same form as used by the other eleven banks and by the System as a whole, there would have been shown a smaller percentage of reserve than that prescribed by the law. The form of report adopted by the New York Bank may have been as good or even superior to the other form, but the difference referred to illustrates the strain on that bank. At one time, too, the situation was materially helped by the timely deposit by the Federal government of a considerable amount of silver with the New York Bank. Also, the twelve banks of the System gave each other extensive relief by rediscounting heavily for each other, a form of assistance that was of general aid, but was particularly valuable to the New York Bank after November, 1919.

There was clearly a considerable amount of strain on the System. As has just been pointed out, the altered reserve requirements would have made possible a very considerable expansion in deposits, and heavy importations of gold increased this tendency, but neither of these facts explains the strain just referred to.

In the period from 1914 to April, 1917, there was a very heavy demand upon American banks to assist in war financing. The United States was not yet in the conflict, but the vast movements of goods, chiefly to allied countries, called for a large amount of financing, and American banks, in-

cluding the Federal Reserve Banks, assumed the burden.

The Federal Reserve System was designed primarily to aid commercial banking, that is, to assist in those banking transactions that facilitate the movement of goods from producer to consumer. To this general statement a few qualifications should be added by way of reference to such provisions as those regarding savings deposits and trust powers, but in general the statement is correct. When war supplies moved from the United States to Europe our banks gave their assistance. The volume was large but expansion was possible under the Federal Reserve System and with the increased gold supplies prevented any serious strain on the System prior to our entrance into the War and for a considerable time thereafter. Our participation in the conflict and the consequent demand for war financing by our own government definitely altered the situation.

EFFECT OF TREASURY POLICIES

Just what policies should have been followed by the Treasury Department in meeting the war emergency is something on which we probably cannot agree. The facts, however, are clear. The problem was one of securing maximum production and of diverting to war uses a very large fraction of that total product. Two main devices were employed to divert output to the government—taxation and bond issues (including certificates of indebtedness). Both of these were intended to secure the desired funds by encouraging saving. Taxation took funds from a taxpayer, usually much against his will, while he was expected to buy bonds voluntarily.

But the war needs amounted to some \$18,000,000,000 per annum, and at one period payments were as high

as \$2,000,000,000 per month, or at the rate of \$24,000,000,000 per year. Prior to the War our annual savings are estimated to have been at the rate of no more than \$6,000,000,000 or \$7,000,000,000 per year. To treble or more than treble the amount available was probably too great a task for taxation and bond issues combined. At any rate, policies were adopted that resulted in an inflation of the currency and hence forced loans from the general public.

RESERVE BANK FACILITIES FOR WAR FINANCING

If one is to appreciate the position of the Federal Reserve Banks in war financing, several facts must be kept in mind. One is the altered reserve requirements of member banks already referred to. Some of the reductions were made after we entered the War, particularly by the provision that the reserves specified were to be kept, not in the member bank's own vault, but as a deposit account with the Reserve Bank of its district. Along with this must be remembered the other amendment to the law that allowed gold in the hands of the Federal Reserve agent held by him against issues of Federal Reserve notes to be counted as part of the required reserve of his Federal Reserve Bank. Also, there must be mentioned the policy early adopted by the Reserve System of concentrating the gold and gold certificates of the country in the vaults of the Reserve Banks, Federal Reserve notes being issued in their place.

There were two other important provisions of the law. One of them states that the Reserve Banks are to be fiscal agents of the government. This places them in a position in which they are compelled to coöperate in methods of financing decided upon by the Treasury Department.

The other provision is one that appears to the casual reader as of slight significance, but it furnished the basis for many of the important operations of war financing. In Section 13 of the Federal Reserve Act the powers of the Reserve Banks are enumerated. Among the prohibitions there set forth is one against loans on "notes, drafts or bills covering merely investments, or issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities, *except bonds and notes of the Government of the United States.*

The exception in the last words of this quotation was not particularly significant at the time of the passage of the Act—in fact it was rather commonplace. Yet it became very important during the War. The Reserve Banks could and did lend on government bonds and notes as security.

To the large amount of latitude thus allowed additions were made from time to time through rulings made by the Federal Reserve Board. Thus it does not seem entirely clear to the layman whether the law permits a Reserve Bank to discount the direct obligation of a member bank. The writer was of the opinion that it did not, and that only the rediscounting of customers' paper was acceptable. That he was wrong is shown by the fact that this direct discounting was permitted on a very large scale. Member banks discounted their own notes accompanied by Liberty Bonds as collateral security.

Closely associated with this policy were the decisions that notes of this sort might run for as short a time as fifteen days, that they might be renewed somewhat freely as they matured, and that there should be charged for such loans a discount rate no higher than the interest rate paid by the government on the bond offered as collateral.

The provisions of the law as cited opened the way, and the decisions just mentioned let down the bars completely. What followed may be visualized if one's imagination permits him to assume two printing presses in the Treasury Department. On one of them were printed government bonds for sale to the public through the Reserve Banks, which were the fiscal agents of the government. The Reserve Banks delivered the bonds to member banks for actual sale. A customer who was besought to buy a bond protested that he had not the funds, but was informed that he need pay only a small amount at a time, his bank agreeing to advance a loan, retaining the bond as collateral security and charging only the same rate of interest as paid by the government on the bond.

This seemed generous and so aided the sale of bonds that the banks were in need of help to carry their part of the load. They were reassured by being told that they could give their own fifteen-day notes to their respective Reserve Banks, provided they would present with them as collateral these same Liberty Bonds that had been purchased by their customers, but which were not to be delivered until fully paid for. They were also assured of the same low interest rate and of an easy renewal of the notes as they fell due.

Imagine still further that this offer brought such general response from the banks that the Reserve Banks were overwhelmed and their officers hurriedly and urgently besought the Secretary of the Treasury for relief, because of their lack of funds. His answer, however, was reassuring. He merely pointed to the other printing press on which were being printed great quantities of Federal Reserve notes, which were furnished to the Federal Reserve Banks as needed.

Thus the Treasury on one press printed paper money (Federal Reserve notes) which it delivered to the twelve Federal Reserve Banks. They in turn gave them to their members in return for the notes of these banks secured by Liberty Bonds. The member banks were then able to pay the government for the bonds struck off on the other printing press.

The description may be fanciful, but only slightly so. In the good old days, say in the Civil War, the process was much more simple and direct. The government printed the United States notes—the greenbacks—and put them directly into circulation. The modern method is more complex and has its advantages, but in many of its features it is the same.

RESPONSIBILITY FOR INFLATION

As a result of the analysis we have been making, it seems clear that the Federal Reserve Board and the officials of the Federal Reserve Banks cannot be charged with responsibility for any "inflation" that occurred down to the summer or fall of 1919. It was due to (1) altered reserve requirements; (2) an influx of gold, and (3) the policies of war financing for which the Treasury Department was chiefly responsible.

Of the three kinds of depreciation mentioned at the beginning of this article two were evident. The American dollar had greatly appreciated in terms of the leading European currencies, so much so that various stabilizing devices were employed. Foreign currencies had depreciated in terms of our dollar. For this condition neither the government nor the Federal Reserve System was responsible. If we had been still operating under the old National Bank Act with all of its rigidity, the foreign exchange situation would have been no better and might have been worse. After a few

months of wild fluctuations foreign governments gained control of the exchanges by using "pegging" devices, an arrangement that would have been much harder to make if our banking system as a whole had been less well organized. After we entered the War responsibility for this control was largely taken over by our government, which of course used the Federal Reserve System as its fiscal agent. From the proceeds of Liberty Bond sales, advances were made to foreign governments, our Treasury Department receiving and holding their notes for the amounts involved.

There was also a depreciation of our own money, the dollar, in terms of commodities. Prices rose rapidly, but as we have noted this was due in the main to (1) the greater possibility of expansion that would have existed under any reorganization of our banking system; (2) the heavy importations of gold and (3) the fiscal policy of the Government.

The second form of depreciation did not occur; at least, there were no outward evidences of it. Our various forms of paper money at no time were depreciated in terms of gold. In case an open gold market had existed, the situation might have been different, and a premium on gold might have appeared, though probably not.

POST-ARMISTICE TRENDS

But what can be said of conditions from the close of the War late in 1918 until the spring of 1920? During this period prices continued to rise, while the volume of Federal Reserve notes and of deposit liabilities rapidly expanded. Gold imports had ceased and in 1919 the movement was reversed, considerable amounts of gold leaving the country. The exchanges of many of the countries that had been neutral during the War (and even those of

many of the minor belligerents) were against us, and, as restraints on the exportation of gold were gradually removed, the gold started out. The War was over, but prices still rose, while note issues and deposit liabilities kept increasing in spite of the fact that the gold reserve was being withdrawn. The percentage of reserves held by the Federal Reserve Banks declined until it was perilously close to the legal minimum.

In this period, what kinds of appreciation and depreciation occurred? At the end of 1918 a number of the exchanges were against us, but by the fall of 1920 all of the leading exchanges were in our favor, with the exception of Hongkong, Shanghai and Yokohama, and they were rapidly falling, especially the first two. Exchanges that had already been in our favor were becoming more so. The American dollar was appreciating in terms of nearly every other money in the world, or, to reverse it, those moneys were depreciating in terms of our dollar.

Commodities were clearly appreciating in terms of our own money, the evidence being the rise of the price level until well into 1920. Our money was depreciating in value in terms of commodities. There was also a tendency toward a depreciation of paper money (including bank deposits) in terms of gold. Reserves were declining and liabilities expanding with a resultant decline in the percentage of reserve held. Considerable uncertainty and doubt appeared, but there was no actual premium on gold recorded. There was merely a tendency that operated as a distinct warning and that called for corrective action.

The movement was therefore a mixed one. Our dollar was appreciating in terms of foreign money, but was depreciating in terms of com-

modities, while our paper money and our bank deposits were being placed in a more and more precarious position with reference to our standard money—gold. The exportation of gold was helping to appreciate our dollar in terms of foreign currencies, but was imperilling the gold standard at home by weakening our gold reserves while bank liabilities were mounting.

CONDITIONS HINDERING RESERVE OFFICIALS

In fairness to the Federal Reserve officials, several facts should be pointed out. First of all war financing was by no means over. The Victory notes were issued in June, 1919, followed from time to time by large blocks of certificates of indebtedness. The actual fighting of the War was over, but the fiscal operations were not. As fiscal agents for the government the Reserve Banks could not immediately free themselves from the responsibilities that have already been described.

Next it should be remembered that what occurred in the United States was in part paralleled in other countries. Prices were rising in England, France, Italy, Sweden and elsewhere, much more rapidly than in the United States. It is true that many of these countries were more seriously affected by the War than we were, but it is not unfair to urge that many of the same influences that were operating abroad were also affecting us. Complete dissociation from so world-wide a movement could not reasonably have been expected. The upward movement which had lifted prices prior to the signing of the Armistice was not exhausted, and the rise continued. Just as military activities were in evidence for a long time, so the economic forces set loose between 1914 and 1918 could not suddenly be reversed.

But this crude analogy between military and economic facts is apt to be very misleading. A more satisfactory explanation is to be found in the fact that the Federal Reserve System was (and for that matter still is) in the first phase of its development. Some of its most important features are not yet fully understood even by many bank officials. Several years after the organization of the Reserve Banks a prominent banker who was serving as director of one of the twelve institutions was said to be unable to grasp some of the fundamentals of the law, and even today a thorough comprehension of some of its leading features is by no means common.

One of the misconceptions that has persisted is the idea that the System is to be merely a source of relief in times of difficulty. That assistance through rediscounting is needed in times of seasonal and cyclical strain is easily understood, but that the Reserve Banks should at all times exercise a supervision over the banking system and often impose its control is not fully realized. Even when the possibility of this control is understood the result is often intense resentment at what seems to be unwarranted interference.

Such control is, however, the usual thing abroad, and the Federal Reserve Act has in it numerous provisions which give a similar power to our system. But legislative authorization is not in itself adequate. The Federal Reserve Board and the officials of the twelve Reserve Banks cannot move too far ahead of public opinion, especially banking opinion, nor can they go too violently in opposition to it. Perhaps the most important single device by which the Reserve Banks can control the money market is the rediscount rate, but the mere statement of that fact does not mean that

they can freely employ this device. An important measure of public support is necessary in case such a power is actually to be used.

WHY THE DISCOUNT RATE WAS NOT RAISED

It has been argued that at the close of active hostilities the Reserve Banks should have exercised this power by rapidly raising their rediscount rates until they were above the rates charged by member banks to their customers. There would then have been no gain to the member banks in rediscounting; they would have curtailed accommodations to their customers and inflation would have quickly been checked. The Bank of England thus controls the money market of England. Why could not our Reserve Banks do the same? What reply can be made to this argument?

Two observations may be made. First of all, the British method has been employed for many years, and the banking community of England is accustomed to it, accepting it as a matter of course. Our Reserve System was authorized in 1913 and not organized until 1914, several months after the Great War had started.

Next, it is to be remembered that from 1914 to 1918, and especially during 1917 and 1918, the fiscal policy of our government made it impossible to initiate such a policy of control. A rediscount rate higher than the market rate, or, at least, one higher than the rate of interest on Liberty Bonds, would have made impossible the methods of financing that were employed.

From 1914 to April, 1917, the Federal Reserve Bank of New York did succeed in keeping its discount rate above that for commercial paper, thus adhering to the policy of the leading foreign banks. With the entrance of the United States into the War,

conditions changed. During 1917 and 1918 the minimum discount rate of the Bank of England was (as is regularly true in England) considerably higher than the market rate on ninety-day bills in London, but during this period the discount rate of the New York Federal Reserve Bank for commercial paper was regularly lower than the prevailing market rate in New York for the same kind of paper. If control of the market had been the only purpose to be kept in mind during this period, it would have been wise to have raised the discount rates of the Reserve Banks more rapidly than market rates rose, and thus have established control.

Armistice Day found the Reserve Banks still not in control of the situation, and able to influence it only to a minor degree by a scrutiny of particular paper presented for discount or by oversight of the rediscounting done by particular member banks. A Victory Loan had to be floated, and other post-war financing was necessary. Moreover, member banks had discounted large amounts of their own obligations at the Reserve Banks with Liberty bonds as security. On November 15, 1918, the total volume of bills discounted with the Reserve Banks secured by government war obligations was \$1,358,416,000, and on February 27, 1920, it was \$1,572,980,000.

Difficulties were accordingly very numerous. To place restraints upon the expansion from 1918 to 1920 would have been difficult, and, even if practicable and desirable, would have called for a very high degree of wisdom and courage. It is the opinion of the writer that our government was very unwise in its decision to float its war issues of bonds and certificates of indebtedness at such low rates of interest. When so large an amount of saving was needed much higher rates would

have been better. The low rates actually offered kept the general security market quiet for a considerable time, but such a policy inevitably meant a rise in prices that injured the general public, including holders of securities, far more than would the offer of higher rates on the new government issues. Nevertheless, the policy was adopted, rates were kept down and the Reserve Banks were and still are the fiscal agents of the government. So long as they are fiscal agents the way in which they perform their other functions must be affected by this relationship.

THE NECESSITY FOR HIGHER DISCOUNT RATES

By the spring of 1920 conditions had somewhat altered. The larger part of war and post-war financing had been completed, and the responsibilities of the Reserve Banks to the government were somewhat lessened. A large volume of rediscounts was still in the possession of the Reserve Banks, but more freedom of movement than before was possible. Accordingly, their policy was altered.

It was clearly time. A very strong case could have been developed for earlier action, but certainly longer delay would have been unwise. Prices were still rising, discounts with the Reserve Banks were increasing and their deposits and their issues of Federal Reserve notes were mounting with leaps and bounds. The percentage of reserves held was near the legal minimum. All banking experience indicated that danger was ahead. Speculation was rampant, and was sure to be followed by a reaction whose seriousness would be proportionate to the delay in its appearance.

There were several special reasons for concern. Our own spring demand for money was at hand, to be followed

the next fall by the usual fall demands for crop-moving purposes. Also the situation in Europe was most disquieting. Monetary systems there were developing alarming tendencies. Prices were rising, bank liabilities expanding and reserves declining far more than in the United States. If a general collapse had occurred we would have been unable to meet it without a general breakdown of our entire business and financial structure. We were already strained almost to the breaking point.

Under such circumstances it was not possible to rely on the judgment of American business men to impose checks of their own. A few began to contract their operations, but the larger number went on piling up their own liabilities at the banks and extending credits abroad and at home with little or no appreciation of the unsound condition. Early in 1920 the rates were raised. It was none too soon. First in Japan and later in other countries the reaction came and prices began to crumble.

In the face of this collapse credits were extended by member banks to customers, often unwisely, but on the whole with a view to easing business through the trying period of the crisis and the subsequent depression. In turn the Reserve Banks gave assistance to member banks at the new and higher rates, but with a very considerable freedom. After a few months deposits and note issues began to decline and reserve percentages to rise, until a condition of comparative banking security was attained.

It was, however, a trying experience. Those who suffered from the fall in prices resented bitterly the new policy that seemed to them responsible for their losses. The sufferers as separate individuals were not, in most cases, to blame. They were merely a part

of a cumbersome and faulty business organization in which periods of excessive expansion and contraction are a frequent and somewhat regular occurrence. In many individual cases injustice was doubtless done borrowers, but on the whole our constructive criticism should be directed at an economic organization that makes such an outcome possible.

CAUTION STILL IMPERATIVE

Nor is the danger by any means over. The period ending in 1920 was one in which money was depreciating rapidly in terms of commodities, and our deposits and paper money in danger of depreciating in terms of gold, as they have actually done in many other countries. The danger in these directions has for the present at least disappeared. But the very policy of higher discount rates which aided in giving this relief brought with it certain unfortunate consequences. Today the currency of nearly every foreign country is at a heavy discount in New York. Gold was for a time being exported from the United States, but from January 1 to November 1, 1921, the net importations of gold have been about \$564,000,000, and the gold holdings of the Reserve Banks have increased by about \$666,000,000.

This influx of gold, together with a decrease in deposit and note issue liabilities, has increased the percentage of reserves held, and relieved us from one serious danger—that of a reserve deficit. But we are at once faced with another. As reserve ratios rise borrowers cannot understand restraints on borrowing. Depreciated exchanges carry no warning to most of us. Foreign government budgets that fail to balance and the imminence of defaults and perhaps repudiations cause little alarm. A default by Germany in her next reparation payment, now

almost due, seems at this writing almost certain. If it occurs, the effects on French finances and business, and through France on all Europe, will be almost incalculable in their gravity.

It is a time for the exercise of the greatest caution. No matter what policy we adopt, hardships will result. Our choice is merely between evils, and no matter what our decision the path ahead is by no means bright. Higher discount rates in the face of the depreciated exchanges means still heavier gold imports. Withdrawal of gold from foreign countries weakens them still more, and adds to our stock of gold that is already disproportionately large.

On the other hand, low interest rates encourage an expansion which ought for our own sakes to be held in check. High bank reserves are by no means a sufficient excuse for a generous loan policy at the present time. A combination of low rates with a careful limitation of loans is the ideal, but very difficult of attainment.

Since default by Germany seems so imminent the sooner it is faced the better, even if it is disguised as a moratorium. After it comes there will be a more general appreciation of what is ahead, and plans can be more effectively made for real recovery. One of our present dangers is the possibility of developing an unhealthy optimism that will lead to a business expansion, too rapid and in wrong directions. If it occurs, the reaction will be worse than a prolongation of the present depression. Gradual recovery is trying, but will be far better.

Then, too, we may hope that during the period of readjustment our Féderal Reserve Bank will be able to secure control of the money rate. Such a control will be no panacea, but it will be an important aid in bringing more stability in our monetary and banking system.